1. What exactly is []?

**Ans: The empty list, which is a list value that contains no items.**

2. In a list of values stored in a variable called spam, how would you assign the value 'hello' as the third value? (Assume [2, 4, 6, 8, 10] are in spam.)

**Ans: spam[2] = ‘hello’**

Let's pretend the spam includes the list ['a', 'b', 'c', 'd'] for the next three queries.

3. What is the value of spam[int(int('3' \* 2) / 11)]?

**Ans: c**

4. What is the value of spam[-1]?

**Ans: d**

5. What is the value of spam[:2]?

**Ans: a,c**

Let's pretend bacon has the list [3.14, 'cat,' 11, 'cat,' True] for the next three questions.

6. What is the value of bacon.index('cat')?

**Ans: 1**

7. How does bacon.append(99) change the look of the list value in bacon?

**Ans: [3.14, 'cat', 11, 'cat', True, 99]**

8. How does bacon.remove('cat') change the look of the list in bacon?

**Ans: [3.14, 11, 'cat', True, 99]**

9. What are the list concatenation and list replication operators?

**Ans: The operator for list concatenation is +, while the operator for replication is \*.**

10. What is difference between the list methods append() and insert()?

**Ans: insert function allows us to add a specific element at a specified index of the list unlike append() where we can add the element only at end of the list.**

11. What are the two methods for removing items from a list?

**Ans: The methods are remove() and pop().**

12. Describe how list values and string values are identical.

**Ans: Lists are similar to strings, which are ordered collections of characters, except that the elements of a list can have any type and for any one list, the items can be of different types.**

13. What's the difference between tuples and lists?

**Ans: Tuples are immutable as opposed to lists which are mutable.**

14. How do you type a tuple value that only contains the integer 42?

**ans: thistuple =(42,)**

15. How do you get a list value's tuple form? How do you get a tuple value's list form?

**Ans: l = [ 2,4,6,8,10]**

**tuple(l) ----- list to tuple**

**t = (2,4,6,8,10)**

**list(t) ------ tuple to list**

16. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain?

**Ans: Variables will contain references to list values rather than list values themselves. But for strings and integer values, variables simply contain the string or integer value.**

17. How do you distinguish between copy.copy() and copy.deepcopy()?

**Ans: copy.copy() create reference to original object.If any changes on copied object - that change the original object. copy.deepcopy() creates new object and does real copying of original object to new one.**